IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF TEXAS WACO DIVISION

WSOU INVESTMENTS LLC D/B/A BRAZOS LICENSING AND DEVELOPMENT,

Plaintiff,

v.

ZTE CORPORATION, ZTE (USA) INC. AND ZTE (TX), INC.,

Defendants.

C.A. NO. 6:20-cv-00489-ADA C.A. NO. 6:20-cv-00492-ADA C.A. NO. 6:20-cv-00495-ADA

DEFENDANTS' RESPONSIVE CLAIM CONSTRUCTION BRIEF

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Pursuant to the Court's First Amended Scheduling Order (Dkt. No. 45)¹ and the Court's February 26, 2021 e-mail order, Defendants ZTE Corporation, ZTE (USA) Inc., and ZTE (TX), Inc. (collectively "ZTE") hereby submits the following opening responsive claim construction brief pursuant to the Order Governing Proceedings ("OGP").

I. Introduction

Plaintiff WSOU Investments, LLC d/b/a Brazos License and Development ("WSOU") asserts eleven patents in *eleven* separate cases. In order to circumvent the OGP standards for claim construction term limits and briefing page limits, and in order to circumvent reducing the number of asserted claims in these cases (WSOU maintains and asserts at least 140 claims), WSOU insisted on consolidating all eleven different patents into unrelated groupings for this claim construction briefing. *See* Dkt. 60, Exs. 1-2. As such, three patents—U.S. Patent Nos. 7,487,240; 8,147,071; and 9,258,232—are briefed herein.

None of these three patents share a common specification, and each is directed towards different technology—despite WSOU's insistence on these technical groupings (with reduced terms and briefing). For instance, first, the '240 patent is directed towards **communications network management and service provisioning**. The '240 patent at 1:9-14. Second, the '071 patent is directed towards **projecting images and sensing movement**. The '071 patent at 1:6-8. Third, the '232 patent is directed towards **controlling the flow of incoming data packets and processing resources**. The '232 patent at 1:9-11.

¹ There are 11 pending cases. Citations throughout refer to new WDTX Case Nos. -00487 through -00497, and specific citations reference to the docket for WDTX Case No. -00487.

Nevertheless, many of the claims are written in functional language without sufficient structure for performing those functions, rendering them subject to 35 U.S.C. § 112(f).² Additionally, because the specifications lack disclosure for performing most of those claimed functions, those claims are indefinite. In some instances, the specifications further fail to provide sufficient support under § 112(a) or § 112(b) and are further indefinite for those reasons. For several other terms, Defendants propose constructions consistent with their use in the intrinsic record, rather than—as WSOU seeks—divorcing them from that context.

II. Legal Standards

A. Claim Construction

The general rule is that claim terms are generally given their plain-and-ordinary meaning. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (*en banc*); *Azure Networks, LLC v. CSR PLC*, 771 F.3d 1336, 1347 (Fed. Cir. 2014), *vacated on other grounds*, 575 U.S. 959, 959 (2015). And, the plain and ordinary meaning of a term is the "meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention." *Philips*, 415 F.3d at 1313.

There are two exceptions, however, to this general rule that terms are generally given their plain-and-ordinary meaning. The two exceptions are when the patentee (1) acts as his/her own lexicographer or (2) disavows the full scope of the claim term either in the specification or during prosecution. *Thorner v. Sony Computer Entm't Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012). To act as his/her own lexicographer, the patentee must "clearly set forth a definition of the disputed claim term," and "clearly express an intent to define the term." *Id.* To disavow the full scope of a

² For consistency, Defendants' references to § 112(a), (b), or (f) are synonymous with § 112(1), (2), or (6) and not intended to reflect any specific meaning to respective patent priority dates and application of AIA or Pre-AIA law.

claim term, the patentee's statements in the specification or prosecution history must represent "a clear disavowal of claim scope." *Id.* at 1366. Accordingly, when "an applicant's statements are amenable to multiple reasonable interpretations, they cannot be deemed clear and unmistakable." *3M Innovative Props. Co. v. Tredegar Corp.*, 725 F.3d 1315, 1326 (Fed. Cir. 2013).

Additionally, extrinsic evidence may be useful in determining the meaning of claim terms, albeit it is "less significant than the intrinsic record in determining the legally operative meaning of claim language." *Phillips*, 415 F.3d at 1317 (quoting *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 862 (Fed. Cir. 2004)). Technical dictionaries may also be helpful. *Id.* at 1318.

B. Indefiniteness

It is undisputed that patent claims must particularly point out and distinctly claim the subject matter regarded as the invention. 35 U.S.C. § 112, (b). Further, "indefiniteness is a question of law and in effect part of claim construction." *ePlus, Inc. v. Lawson Software, Inc.*, 700 F.3d 509, 517 (Fed. Cir. 2012). A claim, when viewed in light of the intrinsic evidence, must "inform those skilled in the art about the scope of the invention with reasonable certainty." *Nautilus Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 910 (2014). This requirement is necessary so that others of skill in the art will have fair notice as to what is off limits in the field and what is available for exploration. *Halliburton Energy Servs. V. M-I LLC*, 514 F.3d 1244, 1249 (Fed. Cir. 2008). Failure to comply with this requirement results in invalidity of the patent. If not, the claim fails § 112, (b) and is invalid as indefinite. *Nautilus* at 901.

C. Written Description

The Patent Act further states, under 35 U.S.C. § 112, ¶ 1, that "[t]he specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same." 35 U.S.C. § 112,

¶ 1. "The test for the sufficiency of the written description 'is whether the disclosure of the application relied upon reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date." *Vasudevan Software v. MicroStrategy, Inc.*, 782 F.3d 671, 682 (Fed. Cir. 2015) (quoting *Ariad Pharm., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (*en banc*)). "[T]he test requires an objective inquiry into the four corners of the specification from the perspective of a person of ordinary skill in the art." *Vasudevan*, 782 F.3d at 682 (citing *Ariad*, 598 F.3d at 1351). Whether the written description adequately supports a patent claim is a question of fact. *Id.* (citing *Ariad*, 598 F.3d at 1355). "A party must prove invalidity for lack of written description by clear and convincing evidence." *Id.*

III. Preliminary Issues

A. Sufficient Notice of Indefiniteness Theory Provided

WSOU generally alleges that "ZTE [] failed to provide any notice as to any indefiniteness theory," for several terms below. *See e.g.*, WSOU Opening Brief, pp. 5-6.³ This is incorrect. Not only is this allegation patently false—as discussed below Defendants provided ample notice, but WSOU provides no case law indicating the level of notice provided was insufficient (because the notice was sufficient).

First, Defendants provided ample notice of the indefiniteness theories below. For instance, in Defendants' Invalidity Contentions dated January 6, 2021, Defendants clearly identified the terms below as indefinite. *See* WSOU Opening Brief, Ex. A, pp. 52-63. This is a sufficient notice. Nevertheless, Defendants further identified the terms below for indefiniteness in the subsequent January 22, 2021 Proposed Terms for Claim Construction (Ex. 1), the February 12, 2021 Proposed

³ WSOU's position is further detached from the record and fails to address the specific nuances of the terms identified herein for this brief. *See also* WSOU Opening Brief, pp. 11-12 (WSOU referencing the "characteristic" term for another patent from another brief).

Claim Constructions (Ex. 2), the February 19, 2021 Disclosure of Extrinsic Evidence (Ex. 3), the February 26, 2021 Narrowed Claim Terms (Ex. 4), and the March 2, 2021 Second Narrowed Claim Terms (Ex. 5). *See also* Dkt. 60, Exs. 1-2. In fact, *WSOU* itself even generated a claim summary chart listing these indefiniteness terms below for each respective patent and presented it to the Court. *See* Dkt. 60, Ex. 1 (February 12, 2021 Emails from WSOU explaining chart supporting WSOU's position for consolidated terms and briefing); *see also* Ex. 6. Given this plethora of notice, it is now improper for WSOU to allege "absence of *any* notice," and the Court should disregard WSOU's argument. WSOU Opening Brief, p. 6.

Second, Defendants clearly indicated that these terms failed "to satisfy the requirements of § 112(b) because the claims fail to point out and distinctly claim the subject matter which the inventors regard as the alleged invention." *See* WSOU Opening Brief, Ex. A, pp. 52-63. There is no other theory or standard, under both AIA and pre-AIA, for determining whether a claim is definite or indefinite. Therefore, WSOU is incorrect because sufficient notice was provided and WSOU is not prejudiced.

Lastly, in view of the ample notice discussed above, and considering that WSOU only *first* raised any notice issue now for this briefing, it is clear that WSOU waived any notice objections. The proper time for notice objections—if at all—was the months prior to these claim construction briefings.

B. Expert Testimony Not Required

WSOU further erroneously alleges that Defendants "waived any reliance on expert testimony to support its position[s]," and therefore are unable to "possibly meet [their] burden" for several indefinite terms. *See e.g.*, WSOU Opening Brief, p. 5. This is untrue, however, because the Federal Circuit made it clear that extrinsic evidence, such as expert testimony, *may be used*, but refrained from requiring expert testimony for proving invalidity for indefiniteness. *Spansion, Inc.*

v. Int'l Trade Comm'n, 629 F.3d 1331, 1344 (Fed. Cir. 2010); see also Lecat's Ventriloscope v. MT Tool & Mfg., 351 F. Supp. 3d 1100, 1113 (N.D. Ill. 2018) (finding that "expert testimony is not per se required" for indefiniteness and further finding that the "lack of expert testimony [] is not fatal.") In fact, courts routinely determine indefiniteness issues without supporting expert testimony. See IPXL Holdings, L.L.C. v. Amazon.com, Inc., 430 F.3d 1377 (Fed. Cir. 2005) and H-W Technology, L.C. v. Overstock.com, Inc., 758 F.3d 1329 (Fed. Cir. 2014) (both affirming district court rulings of indefiniteness without supporting expert testimony).

C. Enablement and Written Description Issues are Ripe for Analysis

WSOU incorrectly alleges that "this Court instructed 'patent validity arguments like lack of enablement and lack of written description are not proper during claim construction proceedings." See e.g., WSOU Opening Brief, p. 7. For this allegation, however, WSOU fails to reference any decision by this Court. See USB Bridge Sols., LLC v. Buffalo Inc., 1-17-CV-001158-LY, 2020 WL 1906898, at *5 (W.D. Tex. Apr. 17, 2020). In contrast, this Court permits enablement and lack of written description analysis at the Claim Construction phase. See Flash-Control, LLC v. Intel Corporation, 2020 WL 4561591 (W.D. Tex. July 21, 2020) (Judge Albright ruling on enablement and lack of written description issues in Claim Construction Order). Thus, it is clear that this Court considers enablement and lack of written description issues ripe for analysis during claim construction.

Lastly, WSOU only *first* raised this written/description issue now for this briefing—well after this issue was raised and analyzed during the term reduction. *See* Dkt. 60, Ex. 1; *see also* Ex. 6. As such, WSOU waived any objections. The proper time for objection—if at all—was the months prior to these claim construction briefings.

IV. U.S. Patent No. 7,487,240 (Case No. 6:20-cv-00489-ADA)

A. Disputed Term 1: "verifying connectivity in the network relating to at least Layer-2 and Layer-3 objects" (Claims 1, 6, and 13)

WSOU's Proposed Construction	Defendants' Proposed Construction
Plain and ordinary meaning	Indefinite under 35 U.S.C. § 112 (b)

First, Defendants incorporate their arguments noted above for the Preliminary Issues in Section III.

Second, advocating for ordinary meaning does not excuse a party from stating what it contends the meaning is. *Baxter Healthcare Corporation v. Mylan Laboratories Ltd.*, 346 F. Supp.3d 643, 653 (D.N.J. 2016) (criticizing party for stating that the "plain and ordinary" meaning applied and then providing no proposed claim construction as to that meaning).

Third, the claimed "verifying connectivity in the network relating to...objects" is insolubly ambiguous and has no ascertainable meaning. The claims and the specification fail to provide the meaning to what "connectivity in the network relating to at least Layer-2 and Layer-3 objects." Exemplary claim 1 is shown below:

- 1. A network management connectivity verification framework comprising:
 - a connectivity verification server to perform unattended connectivity verification jobs; and
 - a connectivity verification application to:
 - define connectivity verification jobs capable of verifying connectivity in the network relating to at least Layer-2 and Layer-3 objects within a given containment hierarchy for the network,
 - control the connectivity verification server to perform the defined connectivity verification jobs, wherein the performing generates at least one of connectivity verification results,
 - display the connectivity verification results,
 - receive a user-input specification of a connectivity verification threshold, compare the connectivity verification results to the specified connectivity verification threshold.

- generate an alarm when the comparison shows that at least one of the connectivity verification results has reached the specified connectivity verification threshold,
- identify Layer-2 and Layer-3 objects within the containment hierarchy affected by the connectivity verification results associated with the alarm, and display the identified Layer-2 and Layer-3 objects.

Furthermore, the claims and specification fail to provide sufficient support for "verifying" said connectivity, as well as, verifying the connectivity relating to Layer 2 and Layer 3 objects. *See* the '240 patent. Nor is it discussed in the prosecution history, as it first appeared in an amendment to overcome a rejection, four years after this application was first filed. Ex. 10, '240 Prosecution History, 272-88. As such, because the claim and the specification fail to inform with reasonable certainty what the "verifying connectivity in the network relating to at least Layer-2 and Layer-3 objects" is, this term is indefinite. *Nautilus*, 572 U.S. 898 at 910.

B. Disputed Term 2: "a given containment hierarchy" (Claims 1, 6, and 13)

WSOU's Proposed Construction	Defendants' Proposed Construction
Plain and ordinary meaning	Indefinite under 35 U.S.C. § 112 (b)

First, Defendants incorporate their arguments noted above for the Preliminary Issues in Section III.

Second, the claimed "given containment hierarchy" is insolubly ambiguous and has no ascertainable meaning. Under the *Phillips* standard, the analysis begins with the claim terms. Here, the claims fail to provide any meaning to what "a given containment hierarchy" means. The term "given" is defined as "particular" or "specified," Merriam-Webster at 530, as is also commonly understood. But the specification does not refer to a "given," "specific," or "stated" containment hierarchy—rather just that the "containment hierarchy may be selected from the containment hierarchy itself." The '240 patent at 8:13-15. Further, the claims provide no information as to what this term means. Exemplary claim 1 is shown below:

- 1. A network management connectivity verification framework comprising:
- a connectivity verification server to perform unattended connectivity verification jobs; and
- a connectivity verification application to:

define connectivity verification jobs capable of verifying connectivity in the network relating to at least Layer-2 and Layer-3 objects within *a given* containment hierarchy for the network,

control the connectivity verification server to perform the defined connectivity verification jobs, wherein the performing generates at least one of connectivity verification results,

display the connectivity verification results,

receive a user-input specification of a connectivity verification threshold, compare the connectivity verification results to the specified connectivity verification threshold,

generate an alarm when the comparison shows that at least one of the connectivity verification results has reached the specified connectivity verification threshold, identify Layer-2 and Layer-3 objects within the containment hierarchy affected by the connectivity verification results associated with the alarm, and display the identified Layer-2 and Layer-3 objects.

Next, we look to the specification, but this term is not used in the specification at any point. See the '240 patent. The only discussion in the prosecution history is that "[a]pplicant respectfully amends the form of base claims 1, 6, and 14 to positively recite the Layer 2 and Layer 3 objects of the network according to their plain meaning, namely, the Layer 2 and Layer 3 objects being defined by a given containment hierarchy for the network." Ex. 10, '240 Prosecution History at 283. Thus, the "given containment hierarchy" defines "Layer 2 and Layer 3 objects," but this statement still provides no basis for what the specified containment hierarchy is in the claim other than it defines Layer 2 and Layer 3 objects, which is a limitation not recited in the claims or otherwise discussed in the specification at all. This discussion and claim limitation first appeared in an amendment to overcome a rejection, four years after this application was first filed, *Id.* at 272-88, and thus this definition from the prosecution history would lack written description and enablement at the time of the filing date should WSOU rely on it. Because the claim and the specification fail to inform with reasonable certainty what the "given containment hierarchy" is, this term is indefinite. *Nautilus*, 572 U.S. 898 at 910.

C. Disputed Term 3: "user-input specification" (Claims 1, 6, and 13)

WSOU's Proposed Construction	Defendants' Proposed Construction
Plain and ordinary meaning	Lack of Written Description / Enablement under 35 U.S.C. § 112(a)

First, Defendants incorporate their arguments noted above for the Preliminary Issues in Section III.

Second, the only time the specification recites this term, "user-input specification" is in the claims—nowhere else. The rest of the specification fails to address the phrase "user-input specification" as part of "a connectivity verification application." This term was not part of the original application either. In the prosecution history, the term first appeared in amended claims on September 17, 2008 to avoid a third rejection. Ex. 10, '240 Prosecution History at 272-88. This was nearly 4.5 years after the filing of the '240 patent, and 5.5 years after the claimed priority date of April 15, 2003. *See id.*, 1, 47. Thus, even if WSOU attempted to argue that the claims provide support for themselves, then this too would be patently false because the original claims failed to recite this term as well.

As the Federal Circuit stated, "[b]ecause claims delineate the patentee's right to exclude, the patent statute requires that the scope of the claims be sufficiently definite to inform he public of the bounds of the protective invention.... Otherwise, competitors cannot avoid infringement, defeating the public notice function of the claims." *Halliburton*, 514 F.3d at 1249. Nothing in the "summary of the invention" describes an input from a user at any point. '240 patent, 6:21-49. Rather, the summary states that "connectivity verification jobs are defined via the connectivity verification application." *Id.*, 6:28-31. But nothing in the summary or the specification links the claimed connectivity verification application with a user input. *See id.*, 6:21-49.

The specification later describes user input through as a separate embodiment that describes "an exemplary window 1400 enabling operations management personnel to define at least one threshold 520 for a connectivity verification job." *Id.*, 13:50-52. But the Specification nowhere describes how window 1400 is related to the connectivity verification application or how window 1400 would be used as part of the connectivity verification application.

The claim language does not help to further explain or define this term. The claims recite "a user-input specification of a connectivity verification threshold" as part of the "connectivity verification application," but nothing in the specification suggests that a user inputs a specification of a threshold in relation to the claimed "connectivity verification application."

As such, for these reasons, this term is invalid and lacks written description/enablement under 35 U.S.C. § 112(a).

D. Disputed Term 4: "the containment hierarchy affected by the connectivity verification result[]" (Claims 1, 6, and 13)

WSOU's Proposed Construction	Defendants' Proposed Construction
Plain and ordinary meaning	Lack of Written Description / Enablement under 35 U.S.C. § 112(a)

First, Defendants incorporate their arguments noted above for the Preliminary Issues in Section III.

Second, the claimed "containment hierarchy affected by the connectivity verification result" lacks written description in the specification and does not enable a PHOSITA to practice the invention. As the Federal Circuit stated, "[b]ecause claims delineate the patentee's right to exclude, the patent statute requires that the scope of the claims be sufficiently definite to inform he public of the bounds of the protective invention.... Otherwise, competitors cannot avoid infringement, defeating the public notice function of the claims." *Halliburton*, 514 F.3d at 1249. Much like the "user-input specification" term, this "affected by the connectivity verification result"

term first appeared in a claim amendment to avoid a third rejection, 4.5 years after the patent application was filed and 5.5 years after the priority date. Ex. 10, '240 Prosecution History at 272-88. Thus, even if WSOU attempted to argue that the claims provide support for themselves, then this too would be patently false because the original claims failed to recite this term as well.

Moreover, the specification fails to provide any basis for the claimed "containment hierarchy affected by the connectivity verification results." For instance, the term "affected" means "to produce an effect upon," Merriam-Webster at 21, as is also commonly understood. The claims and specification, however, do not indicate how the containment hierarchy experiences an effect produced by the connectivity verification result. In fact, the specification only describes objects affected by an alarm. The specification states "[t]he connectivity verification application 502 uses the connectivity verification results and alarm information to display 640 and highlight Layer-2 (506) and layer-3 (504) objects affected by the alarm." '240 patent, 9:37-41 (emphasis added). But nothing in the specification describes how objects are affected by the alarm. Similarly, claim 1, shown below, fails to describe how the containment hierarchy is affected by the alarm, and the specification does not discuss anywhere how the containment hierarchy is affected by the alarm.

- 1. A network management connectivity verification framework comprising:
- a connectivity verification server to perform unattended connectivity verification jobs; and
- a connectivity verification application to:

define connectivity verification jobs capable of verifying connectivity in the network relating to at least Layer-2 and Layer-3 objects within a given containment hierarchy for the network,

control the connectivity verification server to perform the defined connectivity verification jobs, wherein the performing generates at least one of connectivity verification results,

display the connectivity verification results,

receive a user-input specification of a connectivity verification threshold, compare the connectivity verification results to the specified connectivity verification threshold,

generate an alarm when the comparison shows that at least one of the connectivity verification results has reached the specified connectivity verification threshold,

identify Layer-2 and Layer-3 objects within the containment hierarchy affected by the connectivity verification results associated with the alarm, and display the identified Layer-2 and Layer-3 objects.

The prosecution history uses the same language without any description of what being "affected by an alarm" means. *See* Ex. 10, '240 Prosecution History 272-88. Because the specification fails to describe how "the containment hierarchy [is] affected by the connectivity verification results,"—even if those "verification results" are setting off an alarm—the claim lacks a written description and fails to enable a PHOISTA to practice the invention.

V. U.S. Patent No. 8,147,071 (Case No. 6:20-cv-00492-ADA)

A. Disputed Term 1: "the processor" / "wherein the processor is configured to" (Claims 1, 9, 13, and 14)

WSOU's Proposed Construction	Defendants' Proposed Construction
Plain and ordinary meaning	Indefinite under 35 U.S.C. § 112(b)

First, Defendants incorporate their arguments noted above for the Preliminary Issues in Section III.

Second, as an initial matter, the preamble of claim 1 is limiting because claim 1 recites an input and an output of a processor, where the processor is first recited in the preamble as shown below in claim 1. For claim 1, the claimed "processor is configured to" is insolubly ambiguous and has no ascertainable meaning. The recitation of the "processor is configured to" is in claim 1, shown below:

- 1. A processor for providing image data signalling to a projector, the image data signalling representing an image to be projected by the projector, the processor comprising: an input to receive movement signalling associated with movement of the projector; and
 - an output configured to provide image data signalling to the projector, and wherein the processor is configured to provide image data signalling to the projector based on received movement signalling, wherein the movement signalling provides an indication of one or more movement criterion of the projector, the

movement criterion representing one or more of displacement and movement speed of the projector, and wherein the processor is configured to discriminate a movement criterion and to provide associated image data signalling to project associated image data.

The claim recites the "processor is configured to provide image data signaling to the projector based on received movement signaling," but as discussed below for the additional terms, the claim fails to state how the processor is configured to "provide image data signaling... based on received movement signaling." Thus, the processor term itself is indefinite and is further indefinite because the "movement signaling" term is also insolubly ambiguous. For example, the processor could turn on (i.e., claimed image data signaling) because of a switch being pressed (i.e., received movement signaling). In this situation, the claimed movement criterion would be displacement of the projector switch. Because projectors have had on and off switches for decades, the claims cannot inform with reasonable certainty what the scope of the patent is, and are thus indefinite. *Nautilus*, 572 U.S. 898 at 910.

Claim 13 is indefinite—at least for lack of antecedent basis—because it fails to claim "a processor" anywhere in the claim. Claim 13 recites "the processor," but this term lacks antecedent basis. But, even if this claim were re-written to resolve the antecedent basis issue, the claim fails to describe what "receiv[es] movement signaling" or "provid[es] image data signaling" as discussed above. Accordingly, claim 13 is insolubly ambiguous because it fails to inform with reasonable certainty what accomplishes this method. *Nautilus*, 572 U.S. 898 at 910.

B. Disputed Term 2: "movement signaling" / "receiv[ing] movement signaling associated with the movement of the projector" / "corresponding movement signaling" (Claims 1, 9, 13, and 14)

WSOU's Proposed Construction	Defendants' Proposed Construction
Plain and ordinary meaning	Indefinite under 35 U.S.C. § 112(b)

First, Defendants incorporate their arguments noted above for the Preliminary Issues in

Section III.

Second, the term "movement signaling" is indefinite because the claims fail to distinctly point out what is being claimed. Claims 1, 13, and 14 fail to recite what creates the movement signaling and only recite that something receives it. For instance, the specification and claim 9 refer to a "movement sensor," '071 patent, 4:37-49, but the independent claims fail to recite this limitation. But, this limitation is critical for the claim because, merely receiving movement signaling is not sufficiently definite for a PHOISTA to ascertain what is being claimed. Without the limitation, the claim term is ambiguous and without limits.

For claim 9, the claimed "corresponding movement signaling," fails to recite to what the movement signaling corresponds to. Although claim 9 recites what provides the movement signaling, the claimed movement sensor, claim 9, however, fails to inform with reasonable certainty what the claimed "corresponding movement signaling" is provided to. *Nautilus*, 572 U.S. 898 at 910. As such, the term is ambiguous and indefinite.

C. Disputed Term 3: "discriminate" / "discriminate a movement criterion" / "the processor is configured to discriminate a movement criterion" (Claims 1, 13, and 14)

WSOU's Proposed Construction	Defendants' Proposed Construction
Plain and ordinary meaning	Indefinite under 35 U.S.C. § 112(b)

First, Defendants incorporate their arguments noted above for the Preliminary Issues in Section III.

Second, the term "discriminate" is indefinite because the claims fail to distinctly point out what is being claimed. Claims 1, 13, and 14 fail to recite what it means to discriminate. The specification recites "discriminate," specifically reciting that "the processor is configured to discriminate." '071 patent, 1:64-2:3. No other guidance is provided by the specification for

does not define *how* the processor does to discriminate is ambiguous. The specification does not define *how* the processor discriminates and under what parameters it discriminates. For example, the specification and the claims fail to state whether the processor receives code, analog signals, electrical signals, or some other communication—and if received, how it uses such communication data to *discriminate* anything. Accordingly, the claims fail to inform with reasonable certainty what is claimed. *Nautilus*, 572 U.S. 898 at 910.

D. Disputed Term 4: "provide associated image data signaling to project associated image data" (Claims 1, 13, and 14)

WSOU's Proposed Construction	Defendants' Proposed Construction
Plain and ordinary meaning	Indefinite under 35 U.S.C. § 112(b)

First, Defendants incorporate their arguments noted above for the Preliminary Issues in Section III.

Second, the term "provide associated image data signaling to project associated image data" is indefinite. Claims 1, 13, and 14 fail to recite to what the image data signaling and image data is *associated* with.

The specification states that "the processor 1 will provide the associated image data signaling to the projector 2 to project said image associated with the detected movement." '071 patent, 6:55-58 (emphasis added). The claims, however, fail to recite that the claimed "associated image data signaling to project associated image data" is associated with detected movement. Without further explanation, the claim is ambiguous as to what it means to provide "associated image data signaling" or "to project associated image data." Thus, the claims are insolubly ambiguous and fail to inform with reasonable certainty what is claimed. *Nautilus*, 572 U.S. 898 at 910.

VI. U.S. Patent No. 9,258,232 (Case No. 6:20-cv-00495-ADA)

A. Disputed Term 1: "instructions for execution by a traffic flow control system for performing flow control on a flow of data packets for transmission over a link" (Claim 1 and 14)

WSOU's Proposed	Defendants' Proposed Construction
Construction	
Plain and ordinary meaning	Governed by 35 U.S.C. § 112(f)
	Function: execution by a traffic flow control system for performing flow control on a flow of data packets for transmission over a link
	Indefinite under 35 U.S.C. § 112(b);
	Structure: none disclosed.
	Additionally, "flow control" means "regulate movement of a series of data packets"

First, Defendants incorporate their arguments noted above for the Preliminary Issues in Section III.

1. WSOU's Arguments Regarding the Term "Flow Control" within the Means-Plus-Function is Incorrect

WSOU argues that the term "flow control" and the means-plus-function construction of "instructions for execution by a traffic *flow control* system for performing *flow control* on a flow of data packets for transmission over a link," are distinct terms and accuses that Defendants improperly counted these two distinct terms as one. WSOU Opening Brief, fn. 5. It is indisputable that the Court's analysis for both are intertwined. Defendants presented the two terms together because the terms are at the same position in that the means-plus-function analysis incorporates the functional analysis of "flow control." Therefore, WSOU's arguments fail.

2. "Flow Control" Requires Construction in Order to Analyze the Means-Plus-Function Function

WSOU asserts that "flow control" is a term of art but offers no definition of what the term of art might be. WSOU Opening Brief, pp. 14-15. WSOU admits that this term is used multiple times in the specification without a definition. WSOU Opening Brief, p. 15 ("The term is then used in the specification without any explanation of what that term means."). However, WSOU's inability to find a definition in the specification is no excuse for not providing one, particularly because WSOU asserts that the words have some meaning but refuses to offer what that meaning is. And, advocating for ordinary meaning does not excuse a party from stating what it contends the meaning is. *Baxter Healthcare Corporation v. Mylan Laboratories Ltd.*, 346 F. Supp.3d 643, 653 (D.N.J. 2016) (criticizing party for stating that the "plain and ordinary" meaning applied and then providing no proposed claim construction as to that meaning).

In contrast, Defendants' construction is a considered construction in light of the specification and what a PHOSITA would have understood at the time, as illustrated by the IEEE-Wiley Dictionary. The definition of flow control in the IEEE-Wiley Dictionary is given as "[a] system which regulates a flow through a given channel, such as a communications line, a conduction path, or a duct." Ex. 9, IEEE-Wiley Dictionary at 292. Defendants further refined this definition in light of the specification for context of the '232 patent. For "flow," the specification provides enough description to ascertain the meaning. The '232 specification recites, in the "Summary of the Invention," that its invention includes "a traffic flow control system for controlling a flow of ingress data packets to be transmitted over a serial link." '232 patent, 2:12-14 (emphasis added). Further, the '232 patent describes "a method of performing flow control on a flow of data packets for transmission over a serial link." '232 patent, 2:20-22 (emphasis added). The only link recited or contemplated in the '232 patent is a serial link. '232 patent, 2:1-3, 2:12-

14, 2:20-22, 3:9-18, 3:24-29, 3:35-38. Further, dependent claims 6, 12, and 19 recite "the serial link," that has an antecedence basis of "a link" recited in independent claims 1, 12, and 14. Thus, it is uncontroversial that the packets move serially because they move via the serial link, as recited in the specification and the claims. Accordingly, Defendants' proposed definition of flow control is one that recognizes that the regulation of movement of a series of data packets.

WSOU points to the claims as providing the definition for "flow control," but WSOU's analysis is flawed. For instance, claim 1's recitation of "flow control on a flow of data packets for transmission over a link" provides no further understanding of the word "flow" because the word "flow" is used in the definition. Additionally, this recitation provides no further understanding of the word "control," as it does not address what "control" means in this context whatsoever. In theory, control could be turning the power of the system on and off or bending a wire to change the physical path of the data packets, but neither of these meanings are what is intended by the '232 patent.

Thus, Defendants' proposed construction is the only reasonable construction here.

3. The Term is Governed by § 112(f) as Means-Plus-Function

This term should be construction under 35 U.S.C. § 112 (f) because the term "instructions" is a nonce word that recites no structure by itself. Indeed, the term instruction merely means an order which is just as broad as other nonce words such as "means," "device," or similar terms.

WSOU apparently construes "instructions" as "code," or "program code," WSOU Opening Brief, pp. 18-19, although the words are not synonymous. The term "instructions" is a broader term because code is text using the protocol of a particular computer language. Although code is generally thought to be a series of instructions, instructions are not necessarily code.

WSOU ignores this distinction and provides citations to Federal Circuit caselaw to claim recitations of "program" or "code." *Id.* But, there are further distinctions. For instance, *Zeroclick*

involved claims that recited "user interface code," and the Federal Circuit determined "a person of ordinary skill in the art could reasonably discern from the claim language that the words "program," and "user interface code," were used not as generic terms or black box recitations of structure or abstractions, but rather as specific references to conventional graphical user interface programs or code, existing in prior art at the time of the inventions." 891 F.3d 1003, 1008. Similarly, the *Crossroads Systems* Court determined that the device claimed "is not purely functional, but refers instead to a device that can perform the tasks specifically in the claim language." *Crossroads Sys., (Texas), Inc. v. Chaparral Network Storage, Inc.*, No. A 00 CA 217 SS, 2000 WL 35731852, at *4 (W.D. Tex. July 27, 2000). The present claim language is different because the claims include only a bare recital of "instructions for" four times in repetition:

- 14. A non-transitory machine-readable storage medium encoded with instructions for execution by a traffic flow control system for performing flow control on a flow of data packets for transmission over a link, the non-transitory machine-readable storage medium comprising:
 - instructions for receiving, by a controller of the traffic flow control system, a backpressure signal, wherein the backpressure signal indicates a period of congestion;
 - <u>instructions for</u> determining, by the controller of the traffic flow control system, at least one weighting factor to be applied to the flow of data packets based on the received backpressure signal; and
 - **instructions for** adjusting an amount of rate limiting applied to at least a portion of the flow of data packets based on both the determined at least one weighting factor and a content of the backpressure.

(emphasis added).

Nothing in the claim provides further structure for the term "instructions," and the recital of this term is not a specific structure for reciting the claimed function because it is repeated four times. Instead, the structure for the term "instructions" here is generic, and it must be to accommodate each of the four different functions recited in claim 14. The term "instructions" is merely a placeholder word, or a nonce word. Further, the specification provides no structural meaning for "instructions for" or to distinguish the "instructions" recited here from generic

software. In a similar situation, courts have applied means-plus-function. *Cypress Lake Software, Inc. v. Samsung Electronics America, Inc.*, 382 F. Supp. 3d 586, 614 (E.D. Tex. May 10, 2019) (finding that recitations of "code for" is governed by 35 U.S.C. 112 (f)).

4. The Limitations are Governed by 35 U.S.C. § 112(f) and Fails to Provide Support for the Claimed Function

Because the limitations are governed by 35 U.S.C. § 112(f), the specification must disclose a clearly linked function. It does not. The terms "code," "program," "instructions," "computer," "orders," and "interface" are not recited or discussed in the specification. No algorithms or any other discussion of these terms is in the specification. The specification even fails to address any sort of "machine-readable storage medium" on which claim 14 recites that the instructions are stored. Thus, no structure is recited in the specification, and this term is invalid for indefiniteness as it fails to inform with reasonable certainty what is claimed. *Nautilus*, 572 U.S. 898 at 910.

WSOU's identification, WSOU Opening Brief, pp. 18-19, amounts to nothing more than a restatement of the claimed function, which is insufficient, because it says nothing about *how* to perform the claimed function. *See Blackboard, Inc. v. Desire2Learn, Inc.*, 574 F.3d at 1383 (Fed. Cir. 2009); *Function Media, LLC v. Google Inc.*, 708 F.3d at 1318–19 (Fed. Cir. 2013). Accordingly, the claim terms are indefinite.

B. Disputed Term 2: "transmission over a link" (Claims 1, and 14)

WSOU's Proposed Construction	Defendants' Proposed Construction
Plain and ordinary meaning	Indefinite under 35 U.S.C. § 112 (b)

First, Defendants incorporate their arguments noted above for the Preliminary Issues in Section III.

Second, the term "transmission over a link" is indefinite. Claims 1 and 14 of the '232 patent recites "a traffic flow control system for performing flow control on a flow of data packets for transmission over a link." Neither the claims nor the specification describe what the claimed "link" does or what the link connects. The specification and dependent claims 6 and 19 elaborate that the link of exemplary claim 1 is "a serial link," but there is no discussion of what the serial link might be or what it connects. '232 patent, 2:1-4; 2:20-24. Further, the phrase "transmit[ssion] over a[/the] serial link" is used in the specification three times, and each time provide no further information as the specification describes only that "data packets" are transmitted over the serial link. Further definition from the specification describes a more elaborate system, *id.*, 3:8-47, but none of these systems or devices are recited in independent claims 1 and 14. Accordingly, the claims "fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *See Nautilus*, 572 U.S. 898 at 910. To illustrate this uncertainty, the claim could refer to wireless transmission, which involves packet data transmission over a link, yet, the claims fail to recite what the link connects, and so it is impossible to ascertain the scope of the claim.

C. Disputed Term 3: "period of congestion" (Claims 1, and 14)

WSOU's Proposed Construction	Defendants' Proposed Construction
Plain and ordinary meaning	Lack of Written Description / Enablement under 35 U.S.C. § 112(a)

First, Defendants incorporate their arguments noted above for the Preliminary Issues in Section III.

Second, the term "period of congestion" is invalid because the specification lacks written description and an enabling disclosure. As the Federal Circuit stated, "[b]ecause claims delineate the patentee's right to exclude, the patent statute requires that the scope of the claims be sufficiently definite to inform he public of the bounds of the protective invention.... Otherwise, competitors

cannot avoid infringement, defeating the public notice function of the claims." *Halliburton*, 514 F.3d at 1249. Claims 1 and 14 recite "receiving, by a controller of the traffic flow control system, a backpressure signal, wherein the backpressure signal indicates a period of congestion." However, the term "period of congestion," specifically as something indicated by a backpressure signal, is not supported in the specification or the original application papers. For instance, this term was not part of the original application, and rather, the Applicant made a preliminary amendment after the '232 patent application was filed when the term "period of congestion" was first introduced in the claims. Ex. 11, '232 Prosecution History at 30-39. Nothing in the specification discusses "a period of congestion" as something that may be indicated by "a backpressure signal." The specification refers to a backpressure signaling message that may indicate "fill-levels," '232 patent, 3:59-4:7, but nothing in the specification refers to signaling that indicates a time, a period, or any other measure of progress of existence. Thus, this term is invalid because it lacks written description and an enabling disclosure.

D. Disputed Term 4: "rate limiting" (Claims 1, and 14)

WSOU's Proposed Construction	Defendants' Proposed Construction
Plain and ordinary meaning	Lack of Written Description / Enablement under 35 U.S.C. § 112(a)

First, Defendants incorporate their arguments noted above for the Preliminary Issues in Section III.

The term "rate limiting" is invalid because the specification lacks written description and an enabling disclosure. As the Federal Circuit stated, "[b]ecause claims delineate the patentee's right to exclude, the patent statute requires that the scope of the claims be sufficiently definite to inform he public of the bounds of the protective invention.... Otherwise, competitors cannot avoid infringement, defeating the public notice function of the claims." *Halliburton*, 514 F.3d at 1249.

Claims 1 and 14 recite "adjusting an amount of rate limiting applied to at least a portion of the flow of data packets based on both the determined at least one weighting factor and a content of the backpressure signal." However, the specification fails to describe what is meant by rate limiting or how rate limiting is accomplished. The specification describes that "traffic" may be halted or not halted, id., 4:8-50, but these limits are unhelpful because simply turning the device on and off would accomplish the same end goal of stopping the "flow of data packets" recited in claim 1. The remaining level of rate limiting discussed in the specification is a "normal" amount of rate limiting, but nothing in the claims or the specification describe how to achieve a "normal" amount of rate limiting or what that means.⁴ The claims and specification do not enable a POSA to practice the invention because it does not describe how the rate limiting occurs and provides no description of how to make and use a rate limiter. Further, the specification recites that "[t]he specific amount of rate limiting corresponding normal rate limiting could be anywhere between the former two rate limiting extremes, i.e. halt traffic and no rate limiting, and would be configurable." *Id.*, 4:17-20. The Patent must provide a POSA with "some standard for measuring that degree." Biosig Instruments, 783 F.3d at 1378. The specification provides no standard to measure whether rate limiting is achieved and thus it does not enable a POSA to practice the invention.

VII. CONCLUSION

For the foregoing reasons, Defendants request that the Court adopt Defendants' proposed constructions.

⁴ The patent must provide "some standard for measuring that degree." *Seattle Box Co. v. Indus. Crating & Packing, Inc.*, 731 F.2d 818, 826 (Fed. Cir. 1984).

DATED: April 9, 2021 Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that all counsel of record who are deemed to have consented to electronic service are being served with a copy of this document via the Court's CM/ECF system on April 9, 2021.

/s/Lionel M. Lavenue

Lionel M. Lavenue